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Cortright

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(54) **INTERFACE OVERLAY**

(71) Applicant: **OATH INC.**, New York, NY (US)

(72) Inventor: **David S. Cortright**, Los Altos, CA (US)

(73) Assignee: **OATH INC.**, New York, NY (US)

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G06F 3/0481	(2013.01)
G06F 3/0484	(2013.01)
H04L 12/58	(2006.01)

(52) **U.S. Cl.**

CPC ***G06F 3/0481*** (2013.01); ***G06F 3/04842*** (2013.01); ***H04L 51/046*** (2013.01); *G06F 2203/04804* (2013.01)

(58) **Field of Classification Search**

CPC H04L 67/22; H04L 51/046; G06F 2203/04804; G06F 3/0481; G06F 3/04842

USPC 709/206; 455/519, 556.2, 566; 379/67.1, 379/88.17, 202.01

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,278,454	B1 *	8/2001	Krishnan	H04M 1/27455 379/100.05
7,383,316	B2 *	6/2008	Koch	H04L 12/581 709/217
7,698,649	B2 *	4/2010	Quillen	H04L 67/36 715/758
8,007,362	B2 *	8/2011	Aoyama	A63F 13/12 463/34
8,375,316	B2 *	2/2013	Stallings	G06F 3/0488 715/768
9,026,131	B2 *	5/2015	Katpelly	H04W 4/02 455/456.1
2002/0080123	A1 *	6/2002	Kennedy	G06F 3/041 345/173

(Continued)

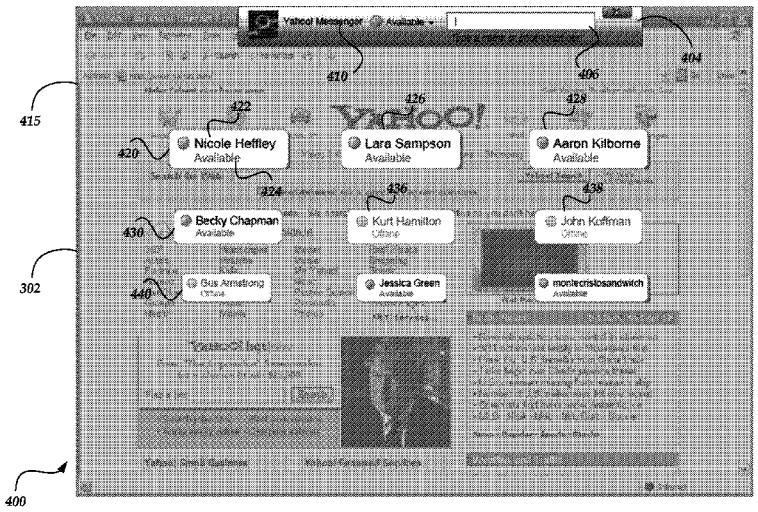
Primary Examiner — Lisa Hashem

(74) *Attorney, Agent, or Firm* — James J. DeCarlo; Greenberg Traurig, LLP

(57) **ABSTRACT**

A method and apparatus for providing a user interface overlay. In one embodiment, a toolbar remains visible and can be selected at any time to activate the interface overlay. The interface overlay provides an easily visible list computing options, such as contacts, that overlays the entire display area. The background of the overlay may be semi-transparent so that underlying windows are still visible, but the list is highlighted. The list includes selectable display elements with display characteristics, such as size or color, that indicate one or more attributes associated with the corresponding computing options, such as a frequency of interaction with certain contacts. In one embodiment, groups of contacts can be sorted or filtered by the attributes before display. Each selectable display element identifies a contact and may indicate a current availability. A user selects a display element to initiate communication, such as an instant messaging chat session.

16 Claims, 6 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

2007/0129112 A1* 6/2007 Tarn H04M 1/72552 455/566
2007/0150830 A1* 6/2007 Ording G06F 3/0481 715/784
2008/0133580 A1* 6/2008 Wanless H04L 12/5815
2008/0155471 A1* 6/2008 Lynn H04M 1/72547 715/811
2008/0207271 A1* 8/2008 Krutik H04M 1/274583 455/566
2009/0143052 A1* 6/2009 Bates G06F 17/30575 455/414.2
2009/0187630 A1* 7/2009 Narayanaswami .. G06Q 10/107 709/206
2009/0273659 A1* 11/2009 Lee H04N 7/147 348/14.02
2009/0291676 A1* 11/2009 Park H04M 1/72522 455/418
2009/0319616 A1* 12/2009 Lewis, II H04W 24/00 709/206
2010/0197291 A1* 8/2010 Cho H04M 3/42374 455/418
2010/0227649 A1* 9/2010 Lestreus G06Q 30/02 455/566
2011/0070895 A1* 3/2011 Ichinose H04M 1/2745 455/456.1
2011/0119222 A1* 5/2011 Rosinski H04W 16/18 706/50
2011/0131497 A1* 6/2011 Goran G06F 3/0481 715/723
2012/0331399 A1* 12/2012 Eidelson H04M 1/72552 715/753
2013/0027335 A1* 1/2013 Li H04M 1/27455 345/173
2013/0110940 A1* 5/2013 Pasquero H04M 1/72552 709/206
2013/0173336 A1* 7/2013 Evans G06Q 30/0201 705/7.29
2014/0143361 A1* 5/2014 Gestsson H04L 51/04 709/206
2014/0181219 A1* 6/2014 Wang H04L 51/32 709/206
2014/0221047 A1* 8/2014 Nam H04M 1/72583 455/564
2014/0282040 A1* 9/2014 Alfaro H04L 51/20 715/739
2015/0269164 A1* 9/2015 Jo G06F 3/0484 707/728
2016/0062608 A1* 3/2016 Foss G06F 3/0481 715/739
2017/0277361 A1* 9/2017 Schulze G06F 9/451
2018/0063043 A1* 3/2018 Van H04L 67/306

* cited by examiner

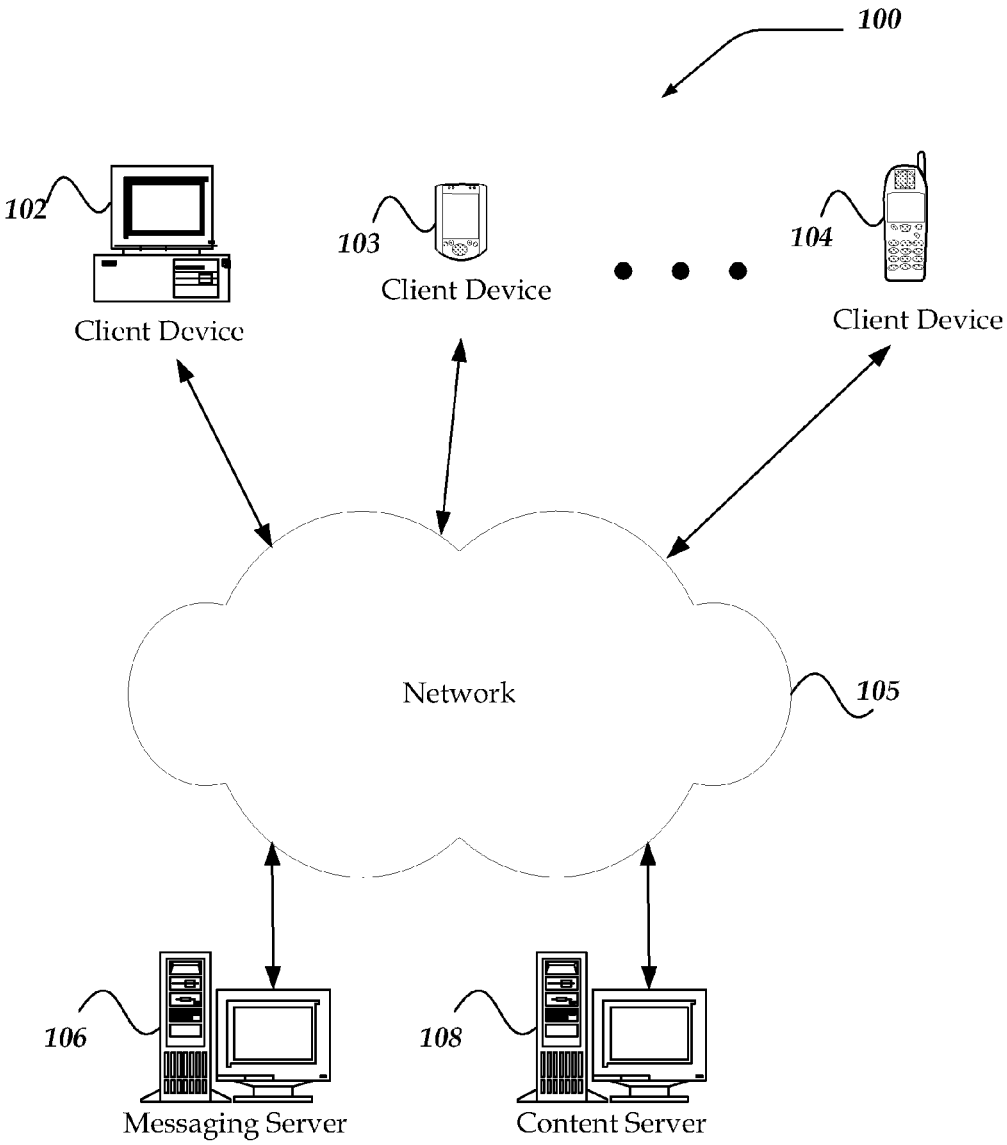

100
102
Client Device
103
Client Device
104
Client Device
Network
105
106
Messaging Server
108
Content Server

FIG. 1

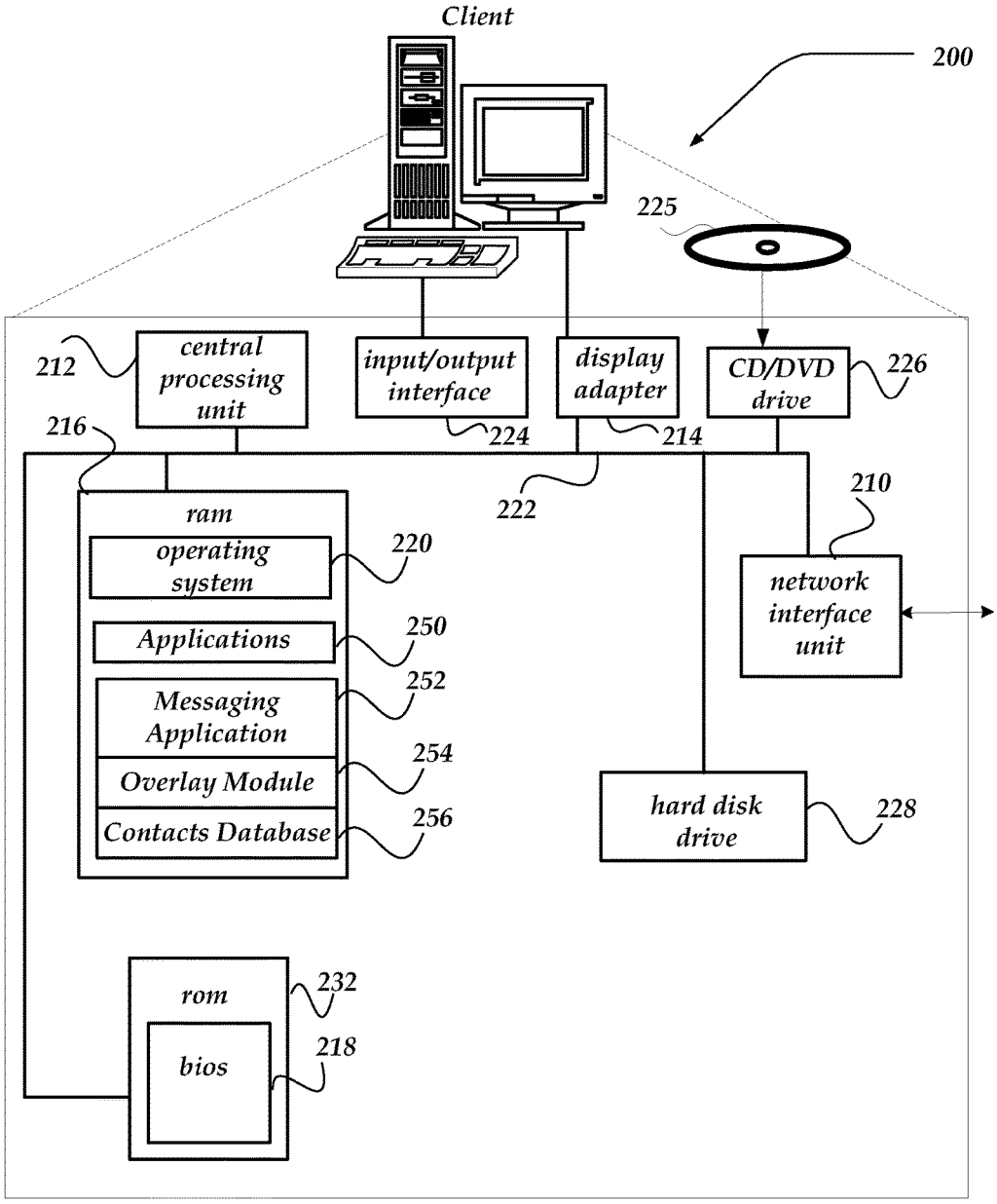

Client
200
225
212
central processing unit
input/output interface
display adapter
CD/DVD drive
226
216
224
214
222
210
ram
operating system
220
Applications
250
Messaging Application
252
Overlay Module
254
Contacts Database
256
network interface unit
hard disk drive
228
rom
232
bios
218

FIG. 2

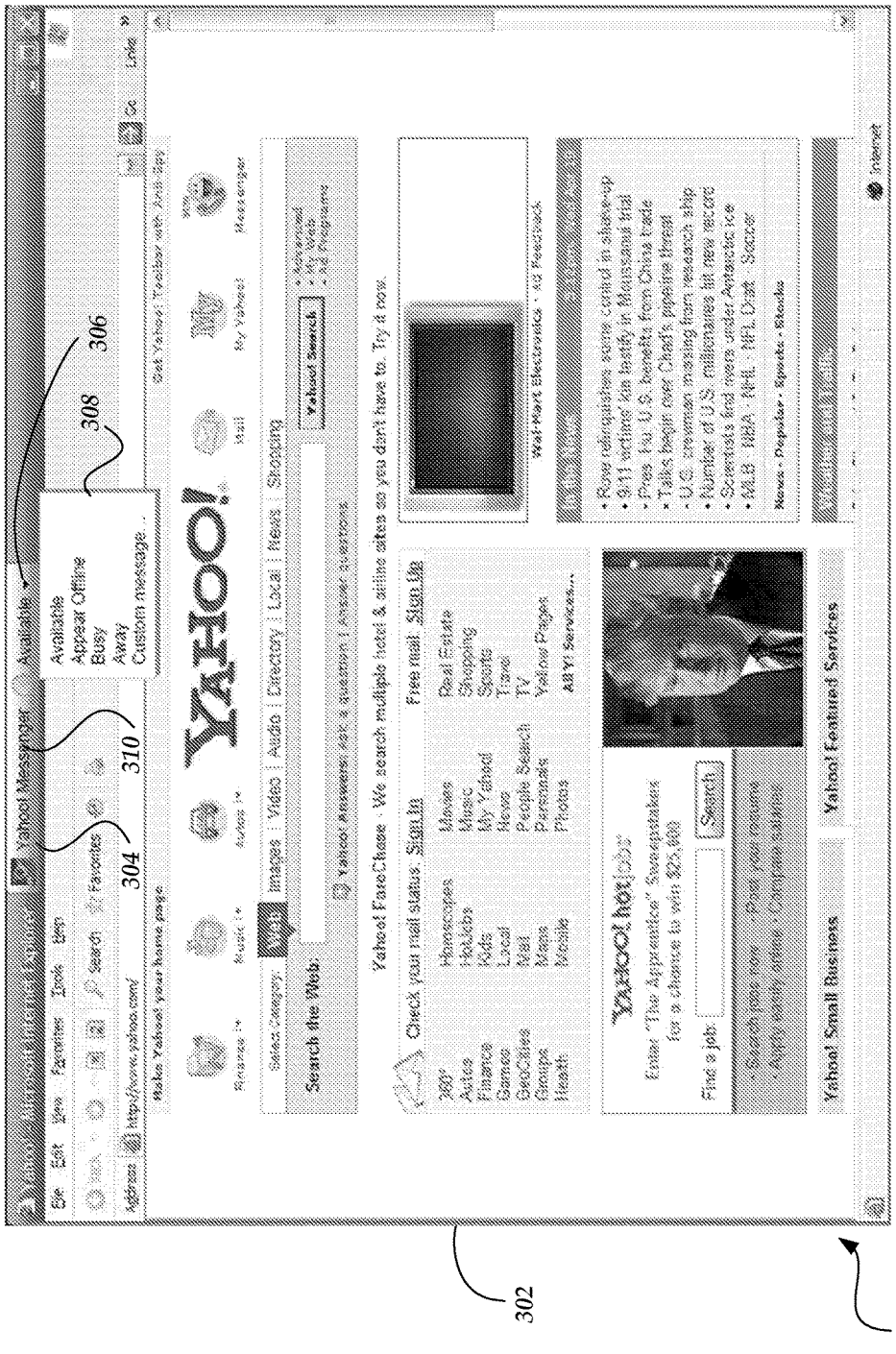

302
300
304
306
308
310
Yahoo! Messenger
Available
Appear Offline
Busy
Away
Custom message...
YAHOO!
Search the Web
Yahoo! Small Business
Yahoo! Featured Services

FIG. 3

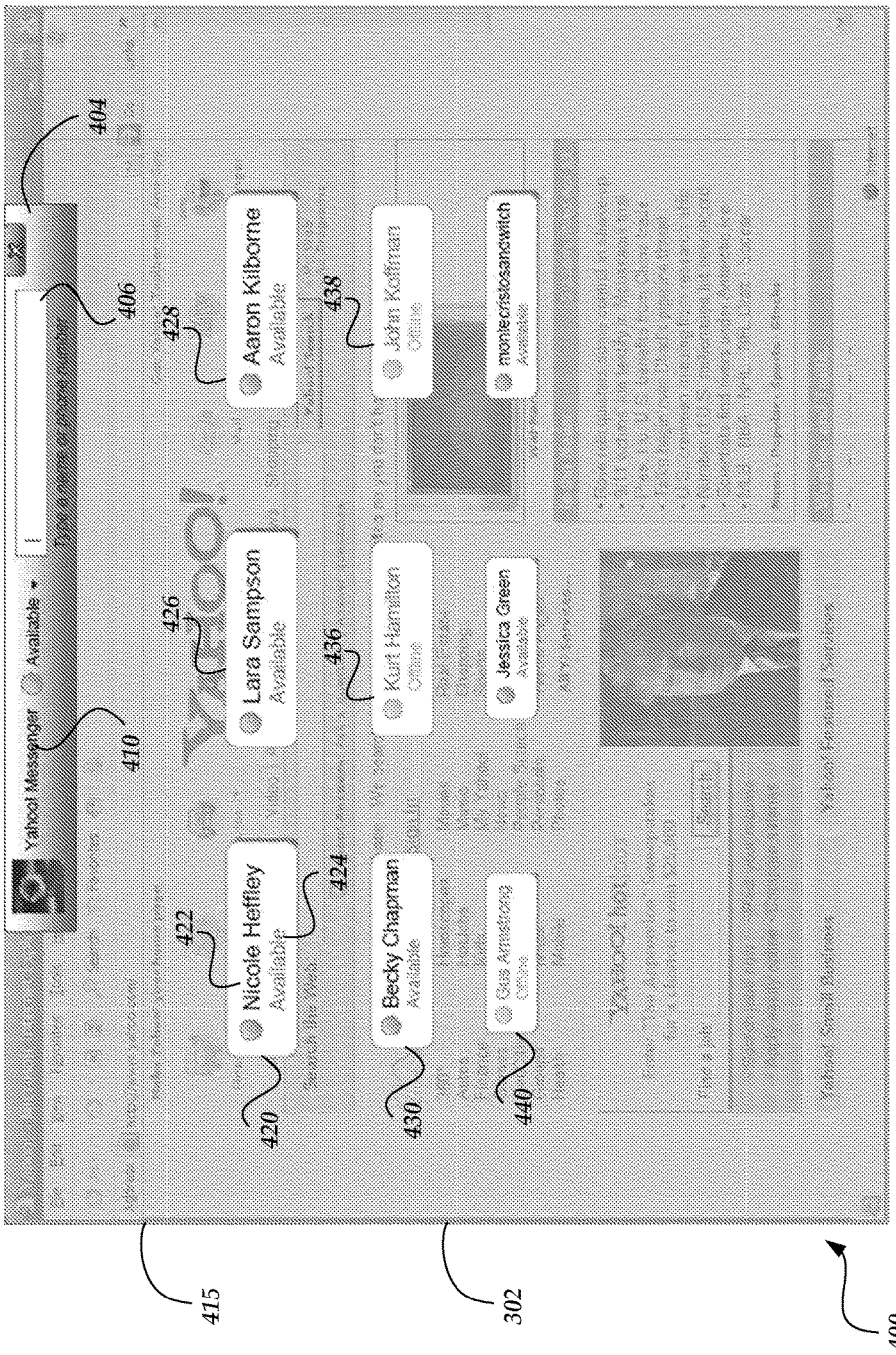

Yahoo! Messenger
Available
Aaron Kilborne
Available
Lara Sampson
Available
Nicole Heffley
Available
Becky Chapman
Available
John Kaffman
Offline
Kurt Hamilton
Offline
Jessica Green
Available
Gus Armstrong
Offline
montecristosandwitch
Available
404
406
410
415
420
422
424
426
428
430
436
438
440
302
400

FIG. 4

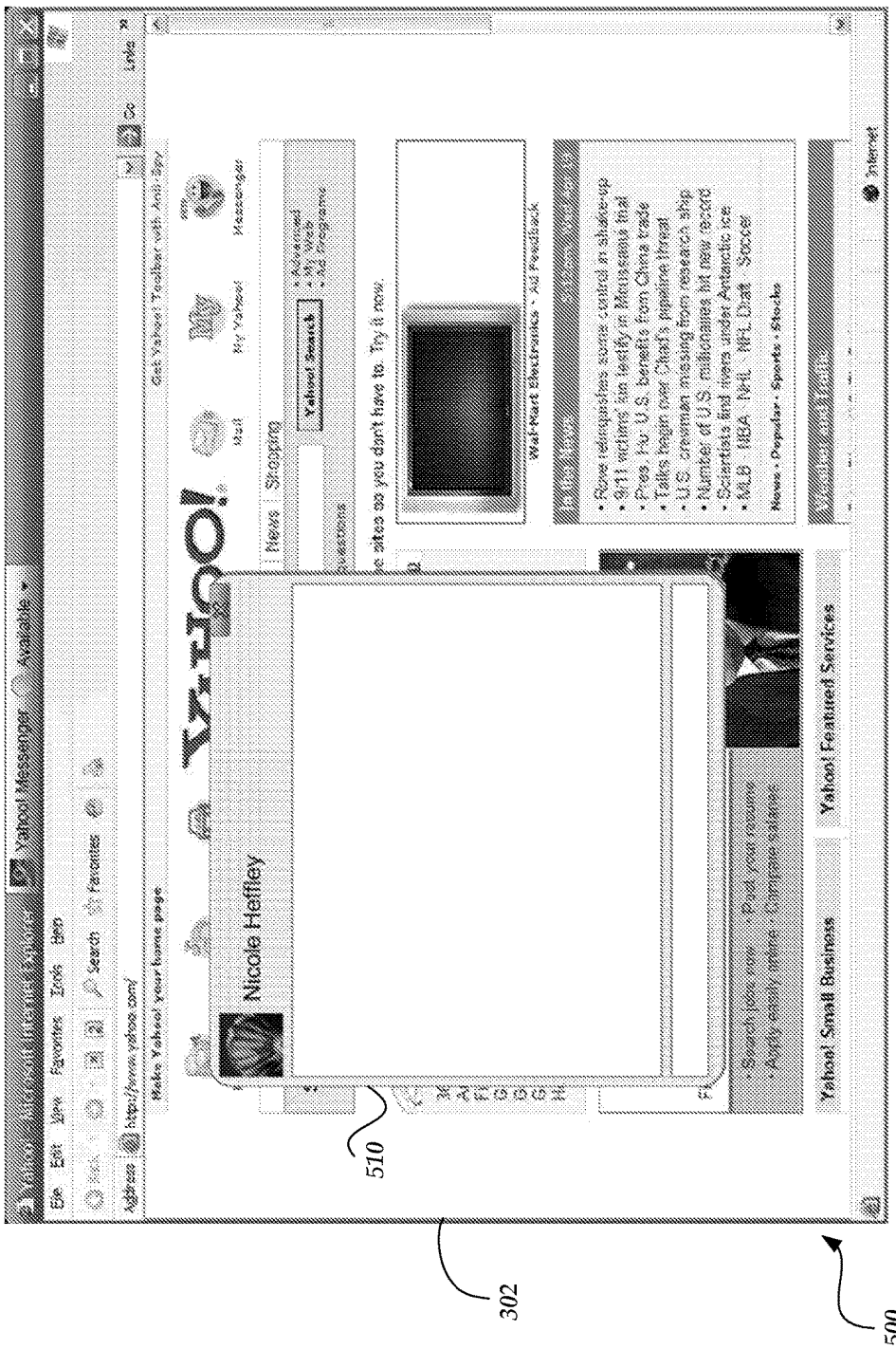

Nicole Heffley
News
Shopping
Yahoo! Small Business
Yahoo! Featured Services
510
302
500

FIG. 5

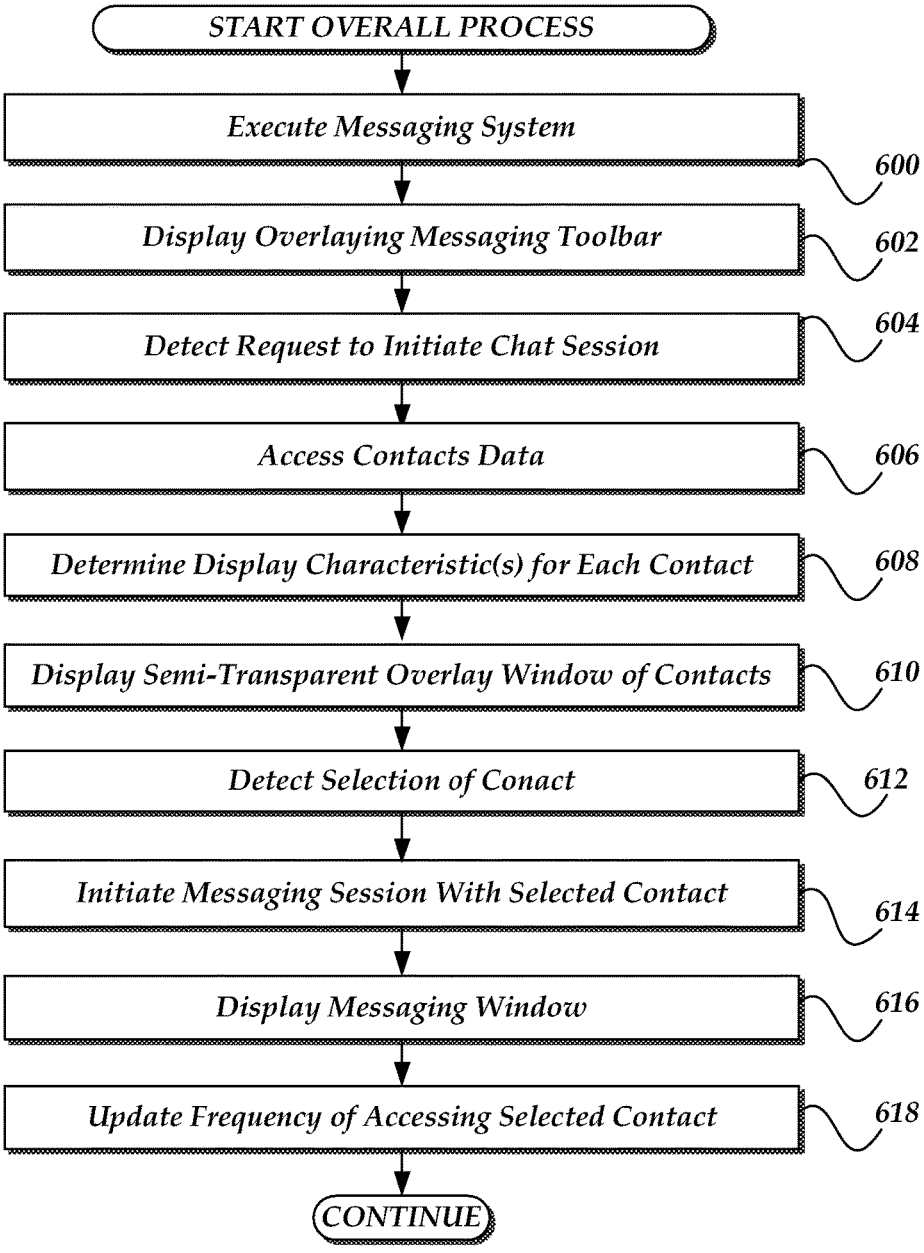

START OVERALL PROCESS
Execute Messaging System
600
Display Overlaying Messaging Toolbar
602
Detect Request to Initiate Chat Session
604
Access Contacts Data
606
Determine Display Characteristic(s) for Each Contact
608
Display Semi-Transparent Overlay Window of Contacts
610
Detect Selection of Conact
612
Initiate Messaging Session With Selected Contact
614
Display Messaging Window
616
Update Frequency of Accessing Selected Contact
618
CONTINUE

FIG. 6

INTERFACE OVERLAY

This application is a continuation of and claims the benefit of U.S. Pat. No. 8,706,169 filed Dec. 28, 2006, which is hereby incorporated by reference in its entirety.

FIELD OF ART

The present invention relates generally to visual computer interfaces, and more particularly to an overlay interface for choosing a single item from a list of items.

BACKGROUND

Stationary and mobile client devices typically include graphical user interfaces that enable a user to make selections from among a number of computing options to perform various tasks. The options may correspond to menu options, settings, data elements, and/or other options for an operating system, database, or application programs. One example application program is a communications program. Client devices often include one or more messaging capabilities such as instant messaging (IM), email, short message service (SMS), multimedia message service (MMS), and the like. Messages are typically exchanged over an electronic network, often through an online messaging service. Some messaging capabilities are provided by a client software module. Other messaging capabilities are provided through a browser that interfaces with a server-based messaging system. In either case, a user can generally store and view a listing of contacts. To access the contact list, a user typically displays a messaging window, or browser, over other windows. This is sometimes referred to as changing the focus to the messaging window. The user then usually selects a menu option to display the contacts list. Each entry in the contact list typically comprises a text name. Some messaging systems may also include a status indictor for each entry. For example, the current online availability of each entry may be displayed with each text name. Some messaging systems may also display an icon, avatar, or thumbnail image associated with some or all entries.

The entries are typically uniform in size, and typically include a scroll bar to scroll through the list of contacts. The visibility of the entries usually depends on the display size of the messaging window and an overall text-size setting. Some messaging windows, such as IM chat windows, are predefined to be relatively small. Notwithstanding the size of the messaging window, many messaging systems restrict the list of contacts to a subportion of the messaging window. Typically, a portion of the messaging window is reserved to display messages, such as chat text. These, and other factors, can make it difficult to distinguish the entries of a contact list.

The contacts are often sorted in alphabetical order. The user may also be able to manually organize the contacts into groups. Some systems enable a user to find one or more contacts with a name search and/or alphabetical filtering. Some messaging systems also keep a list of recent contacts, which generally consists of a sequential list of contacts in order of the most recent contact first. The visibility of the recent contacts also usually depends on one or more factors, such as those discussed above. The sequential listing typically does not indicate which contacts are accessed most often. Once a desired entry is identified, the user typically clicks on the text name or icon to initiate communication with the client associated with the selected entry. The above discussion of messaging systems illustrates one example of user interface issues in general that can be addressed with embodiments of the invention described below.

BRIEF DESCRIPTION OF THE DRAWINGS

Non-limiting and non-exhaustive embodiments of the present invention are described with reference to the following drawings. In the drawings, like reference numerals refer to like parts throughout the various figures unless otherwise specified.

For a better understanding of the present invention, reference will be made to the following Detailed Description of the Invention, which is to be read in association with the accompanying drawings, wherein:

FIG. **1** shows a functional block diagram illustrating one embodiment of an environment for practicing the invention;

FIG. **2** shows one embodiment of a client device that may be included in a system implementing the invention;

FIG. **3** shows a screen shot of a messaging client user interface, illustrating a sample messaging toolbar overlaying a display area;

FIG. **4** shows a screen shot of a messaging client user interface, illustrating a sample contact list overlaying a display area;

FIG. **5** shows a screen shot of a messaging client user interface, illustrating a sample text chat window overlaying a display area; and

FIG. **6** illustrates an example logical flow diagram generally showing one embodiment of a process for providing an interface overlay for a message chat session.

DETAILED DESCRIPTION

The present invention now will be described more fully hereinafter with reference to the accompanying drawings, which form a part hereof, and which show, by way of illustration, specific exemplary embodiments by which the invention may be practiced. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein; rather, these embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art. Among other things, the present invention may be embodied as methods or devices. Accordingly, the present invention may take the form of an entirely hardware embodiment, an entirely software embodiment or an embodiment combining software and hardware aspects. The following detailed description is, therefore, not to be taken in a limiting sense.

The terms "comprising," "including," "containing," "having," and "characterized by," refer to an open-ended or inclusive transitional construct and does not exclude additional, unrecited elements, or method steps. For example, a combination that comprises A and B elements, also reads on a combination of A, B, and C elements. The meaning of "a," "an," and "the" include plural references. The meaning of "in" includes "in" and "on." Additionally, a reference to the singular includes a reference to the plural unless otherwise stated or is inconsistent with the disclosure herein. The term "or" is an inclusive "or" operator, and includes the term "and/or," unless the context clearly dictates otherwise. The phrase "in one embodiment," as used herein does not necessarily refer to the same embodiment, although it may. Similarly, the phrase "in another embodiment," as used herein does not necessarily refer to a different embodiment, although it may. The term "based on" is not exclusive and provides for being based on additional factors not described,

unless the context clearly dictates otherwise. The term "user" can include a computer user, a mobile device user, an online service subscriber, and/or other person using an electronic device.

One aspect of the invention relates to a method and apparatus for providing a user interface overlay. Among other things, one embodiment of the interface overlay provides an easily visible contact list that indicates an attribute associated with contacts, such as a frequency of interaction with certain contacts. The following discussion is directed to an example embodiment for a communication system. However, the invention is not so limited, and other embodiments provide an interface overlay for selecting computing options in other applications, operating system programs, and/or the like.

Illustrative Operating Environment

FIG. **1** illustrates one embodiment of an environment in which the present invention may operate. However, not all of these components may be required to practice the invention, and variations in the arrangement and type of the components may be made without departing from the spirit or scope of the invention.

As shown in the figure, system **100** includes client devices **102-104**, network **105**, a messaging server **106**, and a content server **108**. Network **105** is in communication with and enables communication between each of client devices **102-104**, messaging server **106**, and content server **108**.

Client devices **102-104** may include virtually any computing device capable of receiving and sending a message over a network, such as network **105**, to and from another computing device, such as content server **108**, each other, and the like. The set of such devices may include devices that typically connect using a wired communications medium such as personal computers, multiprocessor systems, microprocessor-based or programmable consumer electronics, network PCs, and the like. Similarly, client devices **102-104** may be any device that is capable of connecting using a wired or wireless communication medium such as a PDA, POCKET PC, wearable computer, and any other device that is equipped to communicate over a wired and/or wireless communication medium. The set of such devices may also include devices that typically connect using a wireless communications medium such as cell phones, smart phones, pagers, walkie talkies, radio frequency (RF) devices, infrared (IR) devices, CBs, integrated devices combining one or more of the preceding devices, or virtually any mobile device, and the like.

Each client device within client devices **102-104** may include a messaging application configured to send and/or receive a message to/from another computing device employing another mechanism, including, but not limited to instant messaging (IM), email, Short Message Service (SMS), Multimedia Message Service (MMS), internet relay chat (IRC), miRC, Jabber, and the like. Client devices **102-104** may further include a browser application that is configured to send, receive, and display web pages, and the like. The browser application may be configured to receive and display graphics, text, multimedia, and the like, employing virtually any web based language, including, but not limited to Standard Generalized Markup Language (SMGL), such as HyperText Markup Language (HTML), extensible markup language (XML), a wireless application protocol (WAP), a Handheld Device Markup Language (HDML), such as Wireless Markup Language (WML), WMLScript, JavaScript, and the like.

Network **105** is configured to couple one computing device to another computing device to enable them to communicate. Network **105** is enabled to employ any form of computer readable media for communicating information from one electronic device to another. Also, network **105** may include a wireless interface, and/or a wired interface, such as the Internet, in addition to local area networks (LANs), wide area networks (WANs), direct connections, such as through a universal serial bus (USB) port, other forms of computer-readable media, or any combination thereof. On an interconnected set of LANs, including those based on differing architectures and protocols, a router acts as a link between LANs, enabling messages to be sent from one to another. Also, communication links within LANs typically include twisted wire pair or coaxial cable, while communication links between networks may utilize analog telephone lines, full or fractional dedicated digital lines including T1, T2, T3, and T4, Integrated Services Digital Networks (ISDNs), Digital Subscriber Lines (DSLs), wireless links including satellite links, or other communications links known to those skilled in the art. Furthermore, remote computers and other related electronic devices could be remotely connected to either LANs or WANs via a modem and temporary telephone link. In essence, network **105** includes any communication method by which information may travel between client devices **102-104**, messaging server **106**, and/or content server **108**.

The media used to transmit information in communication links as described above illustrates one type of computer-readable media, namely communication media. Generally, computer-readable media includes any media that can be accessed by a computing device. Computer-readable media may include computer storage media, communication media, or any combination thereof. By way of example, communication media includes wired media such as twisted pair, coaxial cable, fiber optics, wave guides, and other wired media and wireless media such as acoustic, RF, infrared, and other wireless media.

Additionally, communication media typically embodies computer-readable instructions, data structures, program modules, or other data in a modulated data signal such as a data signal, carrier wave, or other transport mechanism and includes any information delivery media. The terms "modulated data signal," and "carrier-wave signal" includes a signal that has one or more of its characteristics set or changed in such a manner as to encode information, instructions, data, and the like, in the signal.

Messaging server **106** and content server **108** may comprise multiple computing devices or a single computing device. Messaging server **106** may provide online services such as messaging, search, news, shopping, advertising, and/or the like. Content server **108** may provide similar service and/or other services such as web sites, online journals (e.g., blogs), photos, reviews, and the like. For exemplary purposes, the operations of messaging server **106** and content server **108** are described together, and generally refer to messaging server **106**. Briefly, messaging server **106** may include any computing device capable of connecting to network **105** and may manage provide messaging services associated with a network user, such as a user of at least one of client devices **102-104**. Devices that may operate as messaging server **106** include dedicated servers, personal computers, desktop computers, multiprocessor systems, microprocessor-based or programmable consumer electronics, network PCs, and the like.

Messaging server **106** may employ processes such as described in more detail below to send, receive, and manage messages, and enable a network user to maintain contact information for users of messaging server **106**. Messaging

server **106** and/or any of clients **102-104** may be implemented on one or more computing devices, such as a client described with regard to FIG. **2**.

Illustrative Server Environment

FIG. **2** shows one embodiment of a client, according to one embodiment of the invention. Client **200** may include many more components than those shown. The components shown, however, are sufficient to disclose an illustrative embodiment for practicing the invention.

Client **200** includes processing unit **212**, video display adapter **214**, and a mass memory, all in communication with each other via bus **222**. The mass memory generally includes RAM **216**, ROM **232**, and one or more permanent mass storage devices, such as hard disk drive **228**, tape drive, optical drive, and/or floppy disk drive. The mass memory stores operating system **220** for controlling the operation of client **200**. Any general-purpose operating system may be employed. Basic input/output system ("BIOS") **218** is also provided for controlling the low-level operation of client **200**. As illustrated in FIG. **2**, client **200** also can communicate with the Internet, or some other communications network, such as network **105** in FIG. **1**, via network interface unit **210**, which is constructed for use with various communication protocols including the TCP/IP protocol. Network interface unit **210** is sometimes known as a transceiver, transceiving device, network interface card (MC), and the like.

The mass memory as described above illustrates a type of computer-readable media, namely computer storage media. Computer storage media may include volatile, nonvolatile, removable, and non-removable media implemented in any method or technology for storage of information, such as computer readable instructions, data structures, program modules, or other data. Examples of computer storage media include RAM, ROM, EEPROM, flash memory or other memory technology, CD-ROM, digital versatile disks (DVD) or other optical storage, magnetic cassettes, magnetic tape, magnetic disk storage or other magnetic storage devices, or any other medium which can be used to store the desired information and which can be accessed by a computing device.

The mass memory also stores program code and data. One or more applications **250** are loaded into mass memory and run on operating system **220**. Examples of application programs include browsers, schedulers, calendars, transcoders, database programs, word processing programs, spreadsheet programs, and so forth. Applications **250** may also include applications such as a behavior tracker, which may track a user's activities with the user's permission. The behavior tracker may track the user's local and/or network service behaviors (e.g., frequency of communicating with each contact, web searches, online purchases, frequency of posting blog entries, participation in particular network activities, etc.), and/or other behaviors.

Mass storage may further include modules for messaging, such as a messaging application **252** and an overlay module **254**. Messaging application **252** may comprise an IM application, an email application, or the like. Overlay module **254** may be part of, liked to, or separate from the messaging application. The overlay module may be a software program and/or a set of data values that specify settings for the messaging program. In this embodiment, overlay module **254** works with messaging application **252** to manage display of interface overlays as described in further detail below.

Mass storage also includes a contacts database **256**, which may be included with messaging application **252** and/or overlay module **254**, or provided as a separate entity. Contacts database **256** may store names, network addresses, phone numbers, and/or other data for contacting other users.

Client **200** also includes input/output interface **224** for communicating with external devices, such as a mouse, keyboard, scanner, or other input devices not shown in FIG. **2**. Likewise, client **200** may further include additional mass storage facilities such as CD-ROM/DVD-ROM drive **226** and hard disk drive **228**. Hard disk drive **228** is utilized by client **200** to store, among other things, application programs, databases, messaging application **252**, overlay module **254**, contacts database **256**, and the like.

Illustrative Client User Interface

A user interface and operation of certain aspects of an embodiment of the present invention will now be described with respect to FIGS. **3-5**. FIG. **3** shows a screen shot of a display **300** that includes a browser window **302** and a sample messaging toolbar **304**. In this embodiment, messaging toolbar **304** is displayed by a local messaging client, such as an IM client. The messaging toolbar may be displayed in a fixed location, such as at an upper edge of the display area to reduce its impact on the display area, yet remain easily accessible. A user may also drag the messaging toolbar to another location. To enable quick access, this messaging toolbar remains visible over other windows, such as browser window **302**. Messaging toolbar **304** is considered to overlay browser window **302** and other objects that may be displayed. In alternate embodiments, the messaging toolbar may be displayed in a task bar, in a task tray, as a shortcut icon, and/or in another form of control element. In still further embodiments, there need not be a visual representation at all, but instead using a keyboard shortcut, a mouse gesture, a voice command, and/or alternative input method to invoke a module that embodies the invention.

Messaging toolbar **304** may include one or more indicators and/or selectable controls. In this example, messaging toolbar **304** includes a selectable control **306** that enables a user to display a drop-down menu **308** of status options. The user may choose to indicate that the user is available to accept messages, away from the client, or other status. The selected status can be displayed in messaging toolbar **304** to remind the user of the user's current status indicated to other users.

Messaging toolbar may also include a message control **310** to initiate an instant message. The user may hover a cursor over, click on, or double click on, message control **310** to initiate a new instant message. Alternatively, the user may hover the cursor over, click on, or double click on, another portion of messaging toolbar **304** to initiate a new instant message, bring an open chat window into focus, and the like. The operation performed may depend on a current status of the messaging client application. For example, if no chat session is currently active, selecting a portion of messaging toolbar **304** may open a new chat window and display a request for an identifier of another user to initiate the chat session. If a chat session is already active, selecting messaging toolbar **304** may bring the current chat window back into focus. Other controls may include buttons to activate an email system, to enter a search term, to display news, to display an advertisement, and the like.

FIG. **4** shows a screen shot of a display **400** that includes browser window **302** and a modified messaging toolbar **404**. The modified messaging toolbar may result from a change of the messaging toolbar from that shown in FIG. **3** to that shown in FIG. **4** if a selectable control is activated. For example, if the user selects message control **310** of FIG. **3**, the messaging toolbar may be changed to display a contact

entry field **406** as shown in FIG. **4**. Through contact entry field **406**, the user may enter an identifier, such as an IM ID, an online portal user ID, an email address, a phone number, or the like. Upon submission of the identifier, the IM client may initiate an IM communication session with a device associated with the submitted identifier.

When the user selects message control **410**, the IM client also displays a list of computing options such as a contact list **415**. In this embodiment, contact list **415** is overlaid on the entire display **400**. However, the IM client displays contact list **415** with a semi-transparent background, so that underlying browser window **302** is still partially visible. The semi transparent background provides a visual queue that contact list **415** is the current window in focus, and an immediate user action is expected, but suggests that the current focus is temporary. Alternatively, contact list **415** can be displayed with an opaque background to block other windows, with other varying degrees of transparency, with a pattern, or with other characteristics. In a further alternative, contact list **415** can be displayed on a portion of display **400**.

The IM client displays individual contacts with relatively large contact selection elements. The large contact selection elements are generally easier to see than a conventional text list of contacts that may use a relatively small font. The size of each contact selection element, or the size of groups of contact selection elements, may vary based on one or more attributes of the corresponding contacts. For example, the contacts with which the user most frequently communicates may be displayed with the largest contact selection elements. One or more thresholds and/or weighting factors may be used to group contacts by size. In this example, the contacts with which the user most frequently interacts, are identified by large contact selection elements **420**, **426**, and **428**. Contacts with which the user communicates less frequently, may be identified by smaller contact selection elements, such as contact selection elements **430**, **436**, and **438**. Other display characteristics may include differing sizes, shapes, colors, patterns, images, animation, position in relation to other elements, and the like. Other sorting and/or filtering may be made available with additional selectable controls that may be displayed in modified messaging toolbar or displayed in other portions of display **400**. The additional controls may be buttons, drop-down menus, radio buttons, and the like. Additional contact selection elements may be made visible with a scroll bar.

Some or all of the contact selection elements may include various information about the contacts. For instance, contact selection element **420** may include a text name **422** and a status indicator **424**. Other information may include a phone number, a graphic, a thumbnail image, an indicator of the contact's current device type, indicators of different ways to communicate with the contact, such as by IM, by voice over internet protocol (VOIP) connection, and the like. The contact's status or other attribute may also affect the way the contact selection element is displayed. For example, a contact selection element **440** is shown in grayscale, indicating that the contact is offline. If a contact is available, the user may select a contact selection element to initiate a communication session with that contact. Each contact selection element may also include secondary controls for obtaining more information about a particular contact to aid the user in determining which contact to choose. For example, a mouse-over behavior could show additional information in the form of a text box, such as a tooltip. In another example, a small button may bring up additional information. In another embodiment, a toggle control, such as like a disclosure triangle may expand additional information. A variety of other secondary controls may be used.

FIG. **5** shows a screen shot of a display **500** that includes browser window **302** and a sample text chat window **510**. The chat window is displayed after the user selects one of the contact selection elements to initiate a chat session with the selected contact. The contact list is removed from the display and the chat window is overlaid on a portion of the display area. In another embodiment, the contact list may remain at least partial visible, so that the user may initiate another chat session or invite another contact to join the current chat session.

Illustrative Logic

FIG. **6** illustrates an example logical flow diagram generally showing one embodiment of a process for providing an interface overlay for a message chat session. At an operation **600**, a messaging system begins execution. In this example embodiment, the messaging system is described as an instant messaging system executing on a client device and communicating with a server that relays messages between clients. Other messaging systems may include email systems, SMS systems, voice communication systems, and the like. A user may start the messaging system by selecting an icon, or the messaging system may begin execution upon powering on a client device. In another embodiment, the messaging system may execute on a server and be accessed with a browser. Upon execution, the messaging system displays a messaging toolbar at an operation **602**. A display characteristic is set so that the messaging toolbar overlays other display elements, such as windows, icons, and the like.

At an operation **604**, the messaging system detects a user action or other request to initiate a chat session, a new email, a voice call, or the like. The messaging system accesses a database of contact data, at an operation **606**. The contact data may be stored on a local client with the messaging system and/or at a server. For each contact, the contact data includes a contact identifier, a display name, a current status, and the like. In this embodiment, the contact data also includes a frequency value that indicates the frequency with which the contact has engaged in communications with this messaging system. In another embodiment, the contact data may include a priority value assigned by a user of the messaging system to identify high priority contacts from lesser priority contacts. In yet another embodiment, the contact data may indicate a geographic distance between the contact and the executing messaging system. In still other embodiments, the contact data may indicate a level of shared interests, shared online behaviors, reputation, and/or other contact characteristics. Some or all of the contact characteristics may be dynamically determined at the time the request is detected to initiate a new chat session.

The contact data may also include one or more display characteristics that indicate how a contact display element should be displayed. Alternatively, one or more of the display characteristics may be detected or determined at the time the request is detected to initiate a new chat session. For example, the display characteristics may comprise a size at which a contact selection element will be displayed, a color, an order relative to other contact selection elements, a screen location, a status indicator symbol, a graphic, an image, and the like. Accordingly, at an operation **608**, the messaging system determines display characteristics for each contact. The messaging system displays corresponding contact selection elements in a semi-transparent interface overlay window, at an operation **610**. An example is shown in FIG. **4**.

At an operation **612**, the messaging system detects a user selection of a contact. The messaging system may detect a mouse click on one of the contact selection elements. Alternatively, the messaging system may receive a phone number or other identifier through the contact entry field. Voice command or other input means may also be used. The messaging system uses the corresponding identifier to initiate a messaging session at an operation **614**. The messaging system may wait until the session is established or may immediately close the semi-transparent interface overlay window. At an operation **616**, the messaging system displays a messaging widow, such as a chat window. The messaging system also updates information stored about the selected contact at an operation **618**, such as the frequency with which the user communicates with the selected contact.

The above specification, examples, and data provide a complete description of the manufacture and use of the composition of the invention. However, many other embodiments may be implemented. For example, the invention may be embodied in application programs where the user selects one item from a set of many. Example selections include, but are not limited to:

Choosing an item from the results of a web search

Choosing a document to view from a selection of recently used ones on a client and/or network computer

Calling a phone number from the contents of an address book

Opening a web page from a set of recently viewed sites or from the user's bookmarks

Choosing a template or style to apply to a document

Since many embodiments of the invention can be made without departing from the spirit and scope of the invention, the invention resides in the claims hereinafter appended.

What is claimed as new and desired to be protected by Letter Patent is:

1. A method comprising:

displaying, in a messaging system on a display in communication with a processor, an overlaying messaging toolbar overlaying a portion of the display;

detecting, by the processor, a request to initiate a messaging session;

accessing, by the processor, contacts data of a contact associated with a user, the contacts data comprising a geographic distance between the contact and the messaging system;

determining, by the processor, a respective display characteristic for each contact based on the contacts data, the display characteristic for each contact comprising a visibly displayable interface element that has attributes associated with a frequency value that indicates a frequency with which the each contact has engaged in communications with the messaging system; and

displaying, on the display, an overlay window of contacts, each contact in the window displayed in accordance with its respective display characteristic that is displayed along with said respective contact.

2. The method of claim **1**, wherein the messaging session comprises a new email.

3. The method of claim **1**, wherein the messaging session comprises a voice call.

4. The method of claim **1**, wherein the messaging session comprises an instant messaging session.

5. The method of claim **1**, wherein the display characteristic comprises a size at which a contact will be displayed.

6. The method of claim **1**, wherein the display characteristic comprises a color for a contact to be displayed with.

7. The method of claim **1**, wherein the display characteristic comprises an order relative to other contacts at which a contact will be displayed.

8. The method of claim **1**, wherein the display characteristic for each contact comprising a screen location at which each contact will be displayed.

9. The method of claim **1**, wherein the display characteristic comprises a status indicator symbol for a contact to be displayed with.

10. The method of claim **1**, wherein the display characteristic comprises a graphic for a contact to be displayed with.

11. A computing device comprising:

a processor;

a non-transitory computer-readable storage medium for tangibly storing thereon program logic for execution by the processor, the program logic comprising:

first display logic executed by the processor for displaying, in a messaging system on a display, an overlaying messaging toolbar overlaying a portion of the display;

detecting logic executed by the processor for detecting a request to initiate a messaging session;

accessing logic executed by the processor for accessing contacts data of a contact associated with a user, the contacts data comprising a geographic distance between the contact and the messaging system;

determining logic executed by the processor for determining a respective display characteristic for each contact based on the contacts data, the display characteristic for each contact comprising a visibly displayable interface element that has attributes associated with a frequency value that indicates a frequency with which the each contact has engaged in communications with the messaging system; and

second display logic executed by the processor for displaying, on the display, an overlay window of contacts, each contact in the window displayed in accordance with its respective display characteristic that is displayed along with said respective contact.

12. The computing device of claim **11**, wherein the messaging session comprises a new email.

13. The computing device of claim **11**, wherein the messaging session comprises a voice call.

14. The computing device of claim **11**, wherein the messaging session comprises an instant messaging session.

15. The computing device of claim **11**, wherein the display characteristic comprises a size at which a contact will be displayed.

16. A non-transitory computer readable storage medium having computer readable program code in the medium for causing a processor to execute computer instructions, the instructions comprising:

displaying, in a messaging system on a display in communication with the processor, an overlaying messaging toolbar overlaying a portion of the display;

detecting, by the processor, a request to initiate a messaging session;

accessing, by the processor, contacts data of a contact associated with a user, the contacts data comprising a geographic distance between the contact and the messaging system;

determining, by the processor, a respective display characteristic for each contact based on the contacts data, the display characteristic for each contact comprising a visibly displayable interface element that has attributes associated with a frequency value that indicates a

frequency with which the each contact has engaged in communications with the messaging system; and

displaying, on the display, an overlay window of contacts, each contact in the window displayed in accordance with its respective display characteristic that is displayed along with said respective contact.

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